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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,358	03/23/2004	Hong Gan	37505.0239	3948
33751	7590	05/17/2006	EXAMINER	
WILSON GREATBATCH TECHNOLOGIES, INC. 10,000 WEHRLE DRIVE CLARENCE, NY 14031			WILLS, MONIQUE M	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/807,358

Applicant(s)

GAN ET AL.

Examiner

Monique M. Wills

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

This Office Action is responsive to the Amendment filed February 27, 2006. The following have been overcome:

- Objection to claim 8 because of the following informalities: the stoichiometric value "x" is not defined for compound CF<sub>x</sub>. Appropriate correction is required.
- Claims 1-14 rejected under 35 U.S.C. 102(b) as being anticipated by Hallifax et al. U.s. Pub. 2002/0018928.

However, the claims 1-17 are rejected under

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallifax et al. U.S. Pub. 2002/0018928 in view of Kasahara et al. U.S. Patent 6,849,357.

In re claims 1, 5 & 11, Hallifax teaches an electrochemical cell comprising: a casing (80) with a sidewall extended to an open end (fig. 8); a first anode with first (60) and second portions (68D), wherein the first portion (60) comprises a current collector (64) with first and second major sides, supporting first active material (62), where the second portion (68D) comprises the first anode material (62) individually without an opposing coating (Fig. 7). The second portion (68D) is supported on an inner surface of the casing sidewall, which serves as a negative terminal for the electrode. See Figure 7 and (¶27). The cathode (50) includes a second current collector (54) with third and fourth major sides supporting a cathode material, wherein the cathode is connected to a terminal pin that is electrically insulated from the negative casing (¶31). The battery further contains a separator segregating the anode and cathode (¶23).

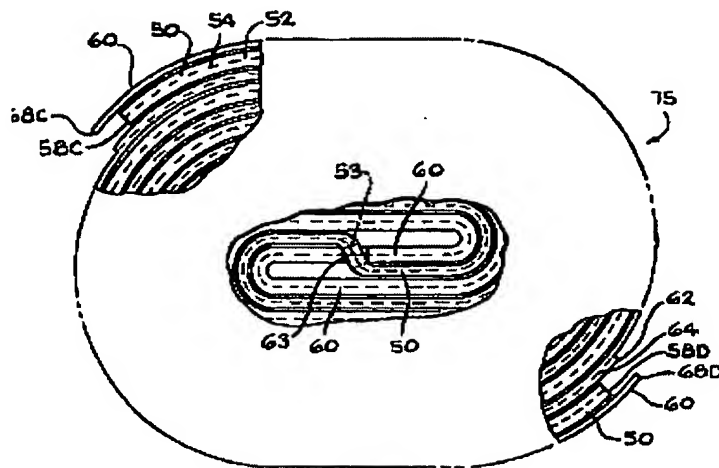


FIG. 7

The electrochemical couple is activated with an electrolyte (¶30), and a lid (84) is used to close the casing. As to claim 11, the method is satisfied, as Hallifax teaches providing all of the instant parts. See Figure 7. With respect to claims 2 & 12, the cell has a case-negative design (¶31). With respect to claims 3 & 13, the cathode electrode provides a cell with a case-positive design (¶31). In re claims 4 & 14, the casing comprises separated spaced apart side walls, where in a case-negative design, the second portion (68D) has an inner surface coated with anodic material, and the active material is supported by the casing walls (fig. 8 and ¶28). With respect to claim 6, the electrodes are associated in a jellyroll (¶5 & Fig. 8). As to claim 7, the anodic material is lithium (¶21). With respect to claim 8, the cathodic material is  $\text{CF}_x$ . With respect to claim 9, the electrolyte comprises a nonaqueous solvent of 1,2-dimethoxyethane or gamma-

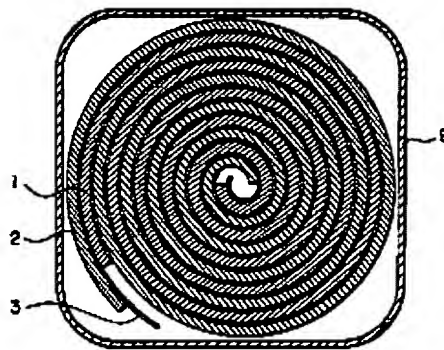
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butyrolactone (¶30). With respect to claim 10, the lithium salt is  $\text{LiPF}_6$  or  $\text{LiAsF}_6$  (¶30).

Hallifax is silent to the anodic material extending beyond the edge of the current collector and directly contacting the inner surface of the casing (claims 1,5,11 & 14-17).

However, Kasahara teaches that it is conventional for the anodic material to directly contact the inner surface of the casing. See Figure 3, and col. 4, lines 1-10.

**FIG. 3**



Hallifax and Kasahara are analogous art, because they are from the same field of endeavor namely, fabricating lithium electrochemical cells.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to directly contact the anodic material as taught by Kasahara, to the inner casing of Hallifax, in order to improve electrically

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conductivity. Furthermore, such modifications would have been obvious, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re japiikse, 86 USPQ 70.

With respect to extending the anodic material beyond the current collector, said alteration would have been obvious since such a modification would have involved a mere change in size of the anodic component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

### *Response to Arguments*

Applicant's arguments, see pages 12 -13, filed February 27, 2006, with respect to the rejection(s) of claim(s) 1-14 under 35 U.S.C. 102(b) as being anticipated by Hallifax et al. U.s. Pub. 2002/0018928 has been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made under 35 U.S.C. 103(a) as being unpatentable over Hallifax et al. U.S. Pub. 2002/0018928 in view of Kasahara et al. U.S. Patent 6,849,357.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.



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If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

05/15/06

A handwritten signature in black ink, appearing to read 'Michael Barr', with a large, sweeping underline that extends to the right.

**MICHAEL BARR**  
**SUPERVISORY PATENT EXAMINER**